

Patently Obvious

Rethinking IP in the Age of AI

Why the Patent-First Playbook is Being Rewritten



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“He who has the gold makes the rules.”ⁱ This clever word play appeared years ago in a humorous cartoon. Today, it stands ready to anoint winners and losers in the race for AI supremacy.

Daunted, some may accept their fate as also-rans. Fortunately, artificial intelligence affords them a different path. Companies in all forms – big, small, new-entrant, or incumbent – can leverage the uniqueness of AI to create their own rules. Rules that enable shifts from a conventional patent-first strategy to one that prominently features trade secrets as a key element of a successful IP-protection strategy needed to take on the big guys.

Setting the Stage - the Race to the Top

The battle for AI is well underway. Holding the two leading spots, the U.S. and China are poised to spend \$470 billion and \$120 billion, respectively, on AI development this year

alone.ⁱⁱ The AI leaders comprise a familiar cast: Google, Meta, Nvidia, Microsoft and AI upstarts OpenAI and Anthropic in the U.S., and Tencent, Alibaba, Huawei, and DeepSeek in China.

Pitted against each other, these nations share a common goal: to lead AI on the global stage. The Trump Administration left little doubt where it stood with the publication just days ago of “America’s AI Action Plan,” broadly pursuing a strategy of AI dominance through massive investment and deregulation, calling for the repeal or revision of all regulations considered harmful to AI development.ⁱⁱⁱ This plan was in no small measure a response to China’s previously-declared ambition of becoming the global leader in AI by 2030 through aggressive subsidies across the entire AI technology stack from semiconductors to applications.^{iv}

Given this, it’s no great surprise then that each is pursuing what can reasonably be described as a “permissive” AI regulatory and governance strategy, in stark contrast to the more restrictive policies from regions such as the European Union that are lagging behind in the AI horse race.^v

Recent Developments in AI Case Law in the U.S.

In addition to a permissive regulatory approach that supports AI and its corporate stewards, the U.S. is similarly witnessing a litigation trend favoring this emergent technology. Starting with *Silverman v OpenAI*, the legal floodgates burst open against Agentic-AI developers in 2023, with dozens of cases filed by artists and authors.^{vi} Notwithstanding the volume of cases, plaintiffs’ claims hang by a thread. Through the pre-trial stages, multiple cases have been substantially weakened, with decisions favoring the big-tech defendants on the primary claims of direct and indirect copyright infringement. Notably, in June of this year, successive opinions were rendered declaring defendants’ use of copyrighted works for training purposes as non-infringing “fair use,” first in *Bartz v. Anthropic* and a few days later in *Kadrey v Meta*.^{vii} I wrote a blog about the central issue of fair-use prior to these decisions.^{viii}

Evolving Patent Landscape – Also Advantage, Big Tech

In addition to these favorable conditions, big-tech companies also wield outsized power in the field of patents. First, by virtue of their standing as among the largest patent holders, including for AI and Agentic-AI patents.^{ix} Although, as we will see, that advantage has been eroding over the past decade.

More significantly, big tech has flexed its patent muscles as leading filers of *Inter Partes Reviews* (“IPRs”), an administrative proceeding created with the passage of the America Invents Act that enables companies to invalidate third-party patents previously granted by the U.S. Patent and Trademark Office.

Based on the latest data, the invalidation rate of patents in IPR proceedings stands at an eye-popping 70%.^x Who sits among the top 10 for initiating invalidation proceedings? The likes of Samsung, Apple, Google, Intel, Microsoft, and Meta.^{xi}

Despite a stated goal of improving the quality of patents, many argue that IPRs have, in practice, armed big tech with arrows aimed expertly, and all too often, at the patents of smaller, cash-poor companies and independent inventors. Between just the top two initiators of IPRs - Samsung and Google – 1185 invalidation proceedings were filed between 2012 and 2021, frequently against comparatively unimposing threats.^{xii} For a first-hand account of the impact of IPRs on small inventors, read the story of the founder of niche tech player *Netlist* chronicling the serial IPR strategy employed pervasively by Google over a period stretching 13 years.^{xiii}

Patent Obstacles in the Age of AI – An Ever-Expanding List

Others have aptly covered the post-Alice fallout under §101 of the Patent Act,^{xiv} so I won't repeat it here. Whether you believe the concern is real or exaggerated, there's no denying the consequential decline in patent enforcement in the years following the combined developments of the launch of IPRs in 2012 and the *Alice* decision in 2014.

In 2023, the 3113 patent infringement cases filed in District Court represented a 25% drop from just four years prior in 2019. Remarkably, it marks a near-50%-decline from 2015.^{xv} As one commentator noted:

“Patent owners are much less likely to assert their patents when they know there is an extremely high likelihood that the patent will be invalidated ...”^{xvi}

Alice and IPRs are not the sole obstacles shaking inventor confidence in patents in the age of AI. With the rise of generative AI, two patent issues have taken center stage. First, can innovations produced by AI meet the “inventorship” requirement for patentability? Second, can outputs of AI systems – including large language models – overcome “obviousness” challenges?

In the most notable “inventorship” case to date, *Thaler v. Vidal*,^{xvii} the Federal Circuit affirmed the PTO's denial of a patent application by Thaler for inventive outputs of an AI system he developed. It did so on the grounds that the claimed invention was produced by a machine, rather than a “natural person” as required by the Patent Act. Subsequently, the PTO issued guidelines concurring with the court's interpretation adding that a natural person must make a “significant contribution” to the invention for an application to proceed.^{xviii}

Equally elusive yet perhaps more complex is the question of what constitutes “non-obviousness” in an AI world under §103. With LLMs training on billions of works, and capable of ingesting virtually the entirety of all possible prior art references for a given

innovation, how does one reasonably clear the non-obviousness hurdle?^{xxix} One commenter shaped the concerns as follows:

"Inventive machines are increasingly being used in research, and once the use of such machines becomes standard, the person skilled in the art should be a person using an inventive machine, or just an inventive machine. Unlike the skilled person, the inventive machine is capable of innovation and considering the entire universe of prior art. As inventive machines continue to improve, this will increasingly raise the bar to patentability. . . The end of obviousness means the end of patents, at least as they are now."^{xx}

A bit dramatic? Perhaps. But this debate - by and between practitioners, inventors, the PTO, and the courts – has only just begun.

What to Do?

The reality is companies are already doing it. Increasingly, company executives are turning to trade secrets.

This trend started with the passage of the Defend Trade Secrets Act ("DTSA") in 2016, which led to a surge in trade-secret cases, growing 25% in the first year alone and rocketing to an all-time high of 1203 cases in 2023.^{xxi} This upswing stands in sharp contrast to the steady decline in annual patent cases filed during a similar timeframe.

Further, as a counter point to the 70% patent-validation rates in IPRs, plaintiff success rates in trade secret cases have been estimated at 84% from 2017-2024, with juries awarding monetary damages in 78% of the cases.^{xxii}

The rise of AI is accelerating this trend. A number of attributes common to AI technologies have provided companies added considerations for including trade secrets in their IP plans, especially as they factor cost and ROI into their near- and mid-term goals:

- The shrinking half-life of AI models: consider the blistering replacement rate of new generations of LLMs from ChatGPT 3.5 to 4.0 to 4.0, compared to product cycles of hardware and traditional software. The time it takes to patent, the costs to obtain and maintain them, and the risks of invalidation make patenting less appealing with fast-moving AI innovation cycles.
- Secrecy over transparency: unlike patents that require disclosure of the invention, trade secrets enable cautious CEOs to maintain their digital IP in confidence, giving them time-to-market advantages and safeguards against precision cloning.
- Broad protections for machine-led discoveries: while patents require formal registration with the PTO and daunting patentability bars, trade secrets involve

no such process and can offer protection for the kind of machine-generated creations subject to increased scrutiny by the PTO and courts.^{xxiii}

Examples of Trade Secret Protection for AI Innovations

Given their flexibility, trade secrets are distinguishing themselves as ideally suited to protect the following elements of AI systems and outputs:^{xxiv}

- *Model parameters and weightings* that drive the accuracy of an LLM's predictive qualities, as they are undetectable and can be closely guarded, and are therefore not vulnerable to conventional reverse-engineering or tear-down practices by competitors.
- *Data-processing and fine-tuning algorithms*, which are the heart of AI systems, as they may otherwise face *Alice* patent challenges as "abstract" subject matter.
- *Outputs of AI systems*, which if left unmodified may be barred from patentability under *Thaler* and PTO guidelines, especially those that result from basic LLM user prompts.

Even the largest tech companies are recognizing the utility of secrecy as a prime tool for the AI IP toolkit. OpenAI is reportedly protecting the system architecture and training data of GPT-4 as a closely-guarded trade secret.^{xxv} Similarly, Tesla is said to be treating its heavily-protected crown jewels of auto-pilot and full-self-driving capabilities as trade secrets.^{xxvi}

Of course, patents will continue to play an important role in a balanced IP plan. With the meteoric rise of Agentic-AI, however, companies have many more factors – and options – to now consider as they decide the forms of IP that best serve their interests.

Conclusion

Patent uncertainty has triggered a moment of reflection, prompting innovators to reconsider their approach to guarding their IP. AI has fostered a new line of thinking. While building out a patent arsenal was once the IP-strategy of choice for those seeking to win respect and restraint from assertive competitors, the landscape has changed.

The speed and dynamism of AI-innovation cycles puts independent inventors in control of deciding the optimal elements of their IP plan. Rather than accept legacy rules and practices, or their status as dubious followers in the race for AI, inventors are discovering that they can operate on a new playing field with new rules of their choosing. No longer relegated to the bench, trade secrets are emerging as a potent weapon for IP success, not only by big-tech incumbents, but by those who challenge them. A tool that is bridging widening IP risks intensified by AI and uniquely positioning innovators as bona fide contenders for AI leadership in the years ahead.

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